

DOCUMENT RESUME

ED 183 287

PS 011 278

AUTHOR Berkeley, Muriel V.: Entwisle, Doris R.
TITLE Kindergarten Social Climate.
INSTITUTION Johns Hopkins Univ., Baltimore, Md. Center for Social Organization of Schools.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
REPORT NO CSOS-R-284
PUB DATE Sep 79
GRANT NIE-G-78-0210
NOTE 28p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Achievement: Blacks: Caucasians: *Classroom Observation Techniques: Comparative Analysis: Early Childhood Education: Individual Differences: *Kindergarten: Low Income: Middle Class: Social Background: *Social Differences: Social Environment: Suburban Schools: *Teacher Behavior: *Teacher Evaluation: *Teaching Methods

ABSTRACT

This is an intensive observational study of teacher behavior in six kindergartens in three schools. The schools were picked to be typical examples of a white middle class suburban school, an integrated lower class urban school, and a black lower class urban school. In all three schools teachers used the greatest proportion of class time (from 33 to 61%) for procedural activities (e.g., lining up), and the next largest proportion of time (from 18 to 37%) for cognitive activities (e.g. color naming). In all schools teacher reprimand exceeded praise and negative evaluations exceeded positive ones. Insofar as the schools observed are typical, the findings do not support hypotheses that achievement differentials for low-income children in the early years of school can be explained by less-than-average exposure to instruction or that teachers in urban schools are more critical of children than teachers of suburban students. (Author/MP)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED183287

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

Kindergarten Social Climate

Grant No. NIE-G-78-0210

Muriel V. Berkeley
Doris R. Entwisle

Report No. 284

September 1979

Published by the Center for Social Organization of Schools, supported in part as a research and development center by funds from the United States National Institute of Education, Department of Health, Education and Welfare. The opinions expressed in this publication do not necessarily reflect the position or policy of the National Institute of Education, and no official endorsement by the Institute should be inferred.

The Johns Hopkins University

Baltimore, Maryland

PS 011278

Introductory Statement

The Center for Social Organization of Schools has two primary objectives: to develop a scientific knowledge of how schools affect their students, and to use this knowledge to develop better school practices and organization.

The Center works through four programs to achieve its objectives. The Studies in School Desegregation program applies the basic theories of social organization of schools to study the internal conditions of desegregated schools, the feasibility of alternative desegregation policies, and the interrelation of school desegregation with other equity issues such as housing and job desegregation. The School Organization program is currently concerned with authority-control structures, task structures, reward systems, and peer group processes in schools. It has produced a large-scale study of the effects of open schools, has developed Student Team Learning Instructional processes for teaching various subjects in elementary and secondary schools, and has produced a computerized system for school-wide attendance monitoring. The School Process and Career Development program is studying transitions from high school to post secondary institutions and the role of schooling in the development of career plans and the actualization of labor market outcomes. The Studies in Delinquency and School Environments program is examining the interaction of school environments, school experiences, and individual characteristics in relation to in-school and later-life delinquency.

This report, prepared by the School Organization program, describes an observational study of six kindergarten classes that focuses on how teachers allocate their time and the amounts of praise and reprimand they deliver to students of different social backgrounds.

Abstract

This is an intensive observational study of teacher behavior in six kindergartens in three schools. The schools were picked to be typical examples of a white middle class suburban school, an integrated lower class urban school, and a black lower class urban school. In all three schools teachers used the greatest proportion of class time (from 33 to 61%) for procedural activities (e.g., lining up), and the next largest proportion of time (from 18 to 37%) for cognitive activities (e.g., color naming). In all schools teacher reprimand exceeded praise and negative evaluations exceeded positive ones. Insofar as the schools observed are typical, the findings do not support hypotheses that achievement differentials for low-income children early in school can be explained by less-than-average exposure to instruction or that teachers in urban schools are more critical of children than teachers of suburban students.

Achievement differentials show up among children very early in their school careers. During first grade some children do well; others, especially those from economically disadvantaged groups, start falling behind. By the end of third grade, national and cross-national data indicate children are launched into achievement trajectories they will follow for the rest of their school careers, perhaps even for the rest of their lives (Husen 1969, Kraus 1973). The persistent and disturbing correspondence between a family's income and a child's school achievement is hard to explain. And explanations so far proposed have either not held up or not been seriously tested.

One explanation, which has been tested and found wanting, is institutional deficiency: simply put, school resources are unequally distributed, poor children attend poor schools. The Coleman report (1966), and further analyses of the same data (Mosteller and Moynihan, 1972), point to surprisingly small differences in children's achievement attributable to school factors. And the failure of massive school-aid programs during the 60's and 70's to improve the achievement of low-status children casts further doubt on inequality of educational opportunity as a root cause of low achievement.

Another explanation, pointing to cultural differences, hinges on language and dialect cleavage. Children who are low achievers are often those who do not speak "network English" at home, so an appealing explanation for their poor performance is that instruction is conducted in a language they either cannot understand or consistently misinterpret. It seems likely, however, that to the extent dialect cleavage does prejudice achievement, it is the social consequences of language differences (what Ogbu (1974) labels the "caste system") rather than language differences

per se that depress achievement. For example, neither Anglophone children in Montreal for whom French is the language of instruction (Lambert, et al., 1970) nor Phillipine children whose lessons are conducted one day in Tagalog and the next day in English (Tucker et al., 1970) fall behind in school. With all or much instruction in a language other than their native tongue, these Canadian and Phillipine children apparently can perform at or above grade level in reading and arithmetic.

Other explanations to account for the relation between low achievement and socioeconomic status gain favor from time to time--that the hidden curriculum of the middle-class home produces children who are socially and cognitively attuned to the school and who therefore learn more easily; that school curricula are organized around lessons having more relevance for middle-class than lower-status children with, for example, primers depicting characters and situations familiar to the middle class child but not to the ghetto child; that school personnel, who are mostly of lower middle-class background, provide low-status or minority group students with a psychological climate hostile to these students' self-confidence and motivation. And on and on. A possible mechanism that many of these "social class" explanations assume, but rarely make explicit, is that "status" or "social class" matter because teachers can spend less time on instruction with lower-class or minority-group children. It is often presumed that such children require "excessive" teacher attention for non-instructional purposes, for example, that teachers must spend time teaching these children school routines such as hand-raising or waiting their turn, or spend time on child-care activities such as helping put on rubbers, fasten clothing, order lunch, and the like. A parallel idea, also usually not made explicit, is that middle-class teachers find little to praise in the behavior of lower-class

children and so seldom reinforce them in the classroom.

Unfortunately the considerable commentary on social class as related to achievement differentials in young children is divorced from observational or behavioral studies of children's early school experience. Children must learn much of what they know inside the classroom, but as yet little systematic information is available about what goes on inside young children's classrooms. Whether the activities that are supposed to occur actually do occur and if so, exactly how such activities help or hinder achievement, are open questions. It is one thing to speculate that teachers in inner city schools spend less time on instruction than suburban teachers, or that the classroom climate in inner-city schools provides less reinforcement than that in suburban schools, quite another to show such to be the case. In an attempt to fill part of this research gap, the present observational study, which is field-based, offers direct evidence on classroom activities in several different kindergartens. The major questions asked are (1) whether teachers devote less time to instruction in some inner city kindergartens enrolling low-income children as compared with some suburban kindergartens enrolling middle-to-high income children, and (2) whether the classroom climate, as measured by the amounts of praise and reprimand administered by the teacher, is different across some schools whose clients come from various socioeconomic levels. The data thus speak to two specific hypotheses that might explain status-related differences in young children's schooling.

The Data

Over the course of the 1975 fall semester, trained observers recorded activities minute-by-minute in two kindergarten classrooms in each of three

schools in Baltimore: a lower-class black segregated urban school, a lower-class integrated urban school, and a middle-class white segregated school. Each school was selected as an exemplar of a kind of elementary school common in the United States, and so although this report presents data for a series of school case studies, the findings may apply more generally. Furthermore, the schools were different in racial composition and SES level, but similar in terms of teachers' qualifications (See Table 1).

Observations were heavily concentrated in the earliest days of the school year, under the assumption that important changes occur early (see Rist, 1970). The unit of analysis was the entire classroom with the teacher as primary target. Using standardized forms developed inductively from pilot tests a year earlier (Figure 1), observers recorded how teachers spent their time, and specifically how they divided their time among five major types of activity. Observers also recorded instances of teachers' use of praise and reprimand.

All six classrooms were observed daily in the afternoon for the first twelve days of school starting in September 1975. Thereafter observations were scheduled twice a month in afternoons through the beginning of 1976. A total of eighteen observations days per class are available for analysis. Inter-observer agreement was consistently above 90% in spot checks where two observers recorded simultaneously.

Six of the ten observers specially trained for this study were undergraduates at the Johns Hopkins University. Three others worked either full-time or part-time as research assistants there. The tenth observer was one of the authors (MVB). All observers were women. Observers in the black segregated school were always black, those in the white segregated school always white. In the integrated school, both black and white observers were

used. Observers were instructed to make themselves as unobtrusive as possible--for example, to politely refuse to take any part in classroom activities. They recorded teacher behavior second-by-second in 15-minute bursts. That is, after recording teacher behavior for one 15-minute period, observers would either rest or turn to another task before recording a second 15-minute period. Each day's observation yielded a maximum of eight 15-minute observation segments. (2 hrs.)

Time Distribution. The pilot study pointed to five categories of time use --interruptions, cognitive, social, procedural, and child care. Figure 1 shows how these five categories were listed on the recording sheets observers used.

Observers used the cognitive column to register time the teacher spent in activities designed to increase children's cognitive knowledge and skills, including familiarity with the letters of the alphabet, phonics, sight vocabulary, the calendar, telling time, numbers, counting, adding and subtracting, color recognition, shape recognition, storytelling and story-listening, and following directions. Following directions was designated a cognitive activity rather than a procedural activity.

The social column represents the time teachers devoted to children's social awareness and skills, including responsibility with tasks such as passing out napkins or crayons, social manners such as behavior at the table during juice time or lunch time, discussion of holidays, opening exercises such as pledging the flag and singing, playing organized games (unless the games are directly related to cognitive activities), art and music (again unless the art or music activities are directly related to cognitive activities), show and tell, class discussion of recent occurrences, introductions to the school and its personnel.

Observers also recorded time spent by teachers on procedural activities. These included: lining up, going to the bathroom, play time inside or outside (if not organized into a social learning or cognitive experience), lunch time or juice time (also if not organized into a learning experience), fire drills, cleaning up from, or preparing for activities, and time the teacher spent at her desk. Trips to the bathroom were coded as procedural rather than as instances of child care (see below) because they are a regular part of the classroom routine in early elementary school.

The child-care category was reserved exclusively for demands upon the teacher's time due to children's lack of preparation for school and/or their young age. Child care included such teacher activities as: settling a tearful child, quieting a noisy class or subgroup, dealing with a temper tantrum, breaking up a fight (this might lead into a social learning activity), zipping jackets, tying shoes.

The numbers on the left side of Figure 1 refer to the number of children with whom a teacher was involved for the various activities.

Data on the teacher's use of classroom time are available in two forms: percentages of total time observed per category, and number of entries per category. Together, these measures permit consideration of both the frequency and duration of classroom activities. If one considered simply the number of entries falling into each category, a ten minute entry (9:00-9:10) would carry no more weight than a one minute entry (9:00-9:01). On the other hand, analyses in which only percentages of total time per category are used do not differentiate between classrooms in which the observers record three or more "one-second" child-care entries 9:00(sec.), 9:01(sec.), 9:05(sec.) from classrooms in which one such entry is recorded.

Praise-Reprimand. As well as noting time distribution patterns in 15-

minute bursts, observers simultaneously noted classroom reinforcement patterns by noting in the "praise" column each explicit compliment the teacher made (and to whom), and in the "reprimand" column each explicit criticism (and to whom). (See the right side of Figure 1). Praise or reprimands conveyed in such subtle ways as tone of voice or raised eyebrows were not recorded. Observers also recorded every instance of a child being given a leadership task such as line-leader, being held up as a good or bad example to the rest of the class, or a child's work being held up as a good or bad example.

Teacher Interviews. At times of their convenience, teachers were interviewed three times using formal questionnaires. Each questionnaire took fifteen to thirty minutes to complete. The questionnaires covered such topics as the teachers' goals for their classes, their rationale for classroom activities, their thoughts about their pupils, and the extent of their interaction with parents, and were administered by the observers.

Results

Time Segmentation Results. As mentioned, time distribution was measured as either percentages of total observation time devoted to a particular activity or as the number of instances of a particular kind of time use. The two measures will be used selectively in presenting the findings.

The ranking of classroom activities as to which received the most time percentagewise and which the second most time was the same in all classrooms. In all classrooms the largest percentage of the teachers' time was devoted to procedural activity. Individual teachers, as shown in Table 2, devoted between 33.1 and 60.5 percent of time to procedural use. The second largest time allocation involved cognitive activity, and accounted for percentages of time varying from 17.8 to 36.9 percent. In

all classrooms, with the exception of Classroom 2, the teachers devoted the third largest percentage of their time to social learning activity, 13.4 to 21.5 percent. In Classroom 2 the teacher devoted the third largest percentage of her time to interruptions (20.1 percent).

While ranking of activities across schools is generally similar, the specific proportions of time allocated to different concerns was in fact quite varied. On the average, 53.8 percent of teacher time is devoted to procedural activity in the suburban, white segregated school, 43.9 percent in the urban, integrated school, and 33.3 percent in the urban, black segregated school. A nested-design analysis of variance revealed that differences between schools are significant compared to differences between classrooms ($F_{2,3} = 6.943$). The percentage of time devoted to procedural activity in the two suburban classrooms each exceed those for any of the other classrooms, and also both classroom means for the integrated school, in turn, are greater than the classroom means for the black segregated school. The data thus point to fairly large differences between schools in time devoted to procedural activities even though this single activity consumes the largest fraction of time in all schools.

For cognitive activity, on the other hand, classrooms differed more than schools. In fact, the three school means are remarkably similar in this respect. Classroom differences are also greater than between-school differences for percentages of time devoted to social learning activity. (Time the teachers devoted to either cognitive activity or social learning activity represents the total time they spent on instruction, and so is given separately in Table 2.)

Because only a small percentage of teacher time was devoted to child care in any classroom, the average number of instances of child care per

fifteen minute recording period is probably a better indicator of "child care activity" than percentages of time. For instances of child care, an analysis of variance revealed differentials between classrooms but not schools to be significant ($F_{3,102} = 5.965$; $F_{2,3} = .765$).

The outstanding pattern in the data on percentage of teacher time devoted to interruptions from outside the classroom is the gap between the urban, black segregated school and the other two schools. The mean percentage of teacher time devoted to interruptions in the urban, black segregated school was 15.9 percent; in the other urban school, 3.4 percent; and in the suburban school, 2.5 percent. This difference is close to significance.

Interruptions are similar to child care in that a fragmenting effect of interruptions may not be reflected in percentages of time. Five one-second interruptions could cause a class as much loss of instruction as one five-minute interruption. It turns out however, that conclusions are much the same whether percentages or instances of interruptions are taken as the indicant. In terms of instances, the distinction between the urban, black segregated school and the other schools remains, but is not as strong. Although teachers in all schools were interrupted equally frequently, teachers in some schools spent more time dealing with interruptions than teachers in other schools.

To sum up: In all schools the teachers spent more time on procedural activity than on any other single activity. The specific percentages of time devoted to procedural activity varied significantly among schools, however, with suburban teachers devoting the most time. In all schools teachers allocated the second largest portion of their time to cognitive activity, and school differences were negligible. For all teachers except

the teacher in Classroom 2, the third largest allocation of time was for social learning activity, and teacher differences exceeded school differences. Percentages of time devoted to child care were too small to be meaningful. Overall schools did not differ significantly in quantity of instances of child care, but classrooms did. The ratings for interruptions suggest school differences, but were not conclusive. There was a trend toward more time spent interacting with students by teachers in the suburban school than by teachers in either of the other schools, but the trend was not strong.

Praise-Reprimand. The quantity of teacher praises and reprimands was measured as the daily average number of instances of each observed per fifteen minute recording period (see Table 3). Differences between schools on these variables were not significant but differences by classroom were highly significant. (For praise $F_{2,3} = .815$, $F_{3,102} = 9.188$; for reprimand $F_{2,3} = .078$, $F_{3,102} = 12.132$.) In addition, teachers who used a large quantity of reprimand also tended to use large quantities of praise, while those who used little reprimand used little praise. Teachers, therefore, differed in the total quantity of evaluative comments (praises and reprimands) they employed. The teachers in Classrooms 1, 4, and 5 used more evaluative comments than the teachers in the other classrooms.

To investigate relative amounts of praise and reprimand, for each observation day the percentages of a teacher's evaluative comments classified as positive and the percentage classified as negative were tallied. Nested two-way analyses of variance revealed non-significant F ratios for differences among schools (for positive evaluations, $F_{2,3} = 1.76$; for negative, $F_{2,3} = 2.37$) but significant F ratios for differences on the same two mea-

asures among classrooms (for positive evaluations, $F_{3,102} = 6.98$; for negative, $F_{3,102} = 3.75$). While there was less praise in the black segregated than in the integrated school, one classroom in the white segregated, suburban school was characterized by a very high quantity of praise and one by a very low quantity. On the other hand, the highest percentages of negative evaluative comments were found in the black segregated school and in the classroom of the black teacher in the integrated school, and the percentage of positive evaluative comments was lowest in the black segregated school. These differences are generally small, however, and the absence of significant school effects suggest that different patterns of praise and reprimand do not characterize these schools which serve lower-income and middle-income, and integrated and segregated student bodies.

That the preponderance of feedback was negative in all schools is a fact shedding light on the quality of these five-year-olds' classroom experiences. Furthermore the excess of reprimand over praise may actually be even greater than the data indicate because an observer in a classroom would be expected to depress reprimand and enhance praise. Most teachers view praise as more socially acceptable. On at least one occasion after a particularly trying day, a teacher apologized to the observer for her frequent use of reprimand.

Discussion

Most classroom time supposedly is devoted to cognitive or social learning activity, yet in every school more time was devoted to procedural activity than to any other type. The prominence of procedural activity could be interpreted as supporting fears that schools are excessively con-

cerned with control. The message transmitted to pupils by this "time" emphasis on procedure could well be that the most important lesson taught in school is to sit still, or to line up quietly, or to attend some other procedural aspect of the school day. Our data could therefore be used to support contentions of such critics as Holt (1969) and Herndon (1971) who believe that school priorities are misplaced even in kindergarten.

The large percentage of time devoted to procedural activity is subject to another interpretation, however. Kindergarten teachers face the task of introducing children to school. Part of that introductory process involves teaching children how to cooperate as a member of a group, especially if they have no preschool experience. Gintis (1971), among others, takes a view consistent with this socialization perspective. He maintains that the preparation for adult work offered by schools consists not so much of academic training but of habit making and personality training. Although he does not provide evidence concerning how teachers actually manipulate their students' personalities and habits, Gintis believes that teachers reward students for being punctual and obedient, and punish them for flexibility and assertiveness. The excess of procedural activity over cognitive activity reported here could be interpreted as support for his position.

While a larger percentage of time was devoted to procedural activity than to any other single activity in all classrooms, the specific percentages of time so allocated did differ substantially between schools. The difference, however, was in a direction opposite from what most explanations of children's achievement differentials based on social class assume. Significantly more time was devoted to procedural matters in the suburban school for white students from middle to high SES backgrounds than in either of the urban schools for low SES students.

In interviews the teachers in the suburban school volunteered that

they saw training in routines as the critical goal of kindergarten, while teachers in the other two schools did not voice such opinions. Altogether, though, because there are a few more children per class in the suburban kindergartens (an average enrollment of 24 students compared to 22 and 17 in the other two schools) and also because better attendance in the suburban kindergartens contributes to an effectively larger class size (average daily attendance of 24 in the suburban school compared to 14 and 15 in the urban schools), the somewhat larger amounts of time spent on procedural matters in the suburban school could easily be attributed to class composition rather than "locus" differences. The major finding is that all kindergartens spent the largest fraction of time in procedural activity, and if anything, suburban children are given larger doses of such training.

Insofar as the observed schools are representative of kindergartens more generally, the data on teachers' use of class time do not support hypotheses that the lower educational achievement of low-income pupils compared to middle-income pupils can be explained by teachers of low-income pupils devoting smaller percentages of time to instruction than teachers of middle-income pupils. The data on percentages of time devoted to instruction (cognitive and social learning activity) show that the mean percentage of time devoted to instruction in the suburban school is lower than the mean for either urban school. If conjectures that low-income pupils are exposed to less instruction are correct, students in the suburban school should be exposed to more instruction than the other students. Furthermore, the data on instructional time by classrooms suggest that the quantity of instruction to which a child is exposed in kindergarten appears to depend more on who his teacher is than on where he attends school.

The absence of significant school effects in the data on child care

fails to support another frequently-stated conjecture, namely that black or low-income pupils come to school less well prepared to handle school routine than white or middle-income pupils. The low percentage of time spent on child care is rather surprising considering that the majority of the observations were taken very early in the school year. The data for child care incidents might be questioned on grounds that there were fewer children in the urban classrooms than in the suburban classrooms, but there was no correlation between the number of children present and the quantity of child care incidents. More crowded classrooms therefore actually may not require the teacher to deal with more behavior problems, as intuition would suggest. A possible explanation for this finding could be that the range of variation in numbers of children attending a particular classroom is too restricted to allow the relationship to surface. The largest standard deviation for attendance within a classroom is only 3.93 (Classroom 2) while the average daily attendance in the suburban school is 8 children more than in the integrated school and almost 10 children more than in the black segregated school. Thus, it is possible that were attendance figures in the urban schools more similar to those in the suburban school the incidents of child care in the urban schools would be more numerous than those in the suburban school. The data, however, cannot address this possibility.

The data for praise vs. reprimand show no clear trends. In fact, teacher differences are far greater than school differences whether praise-reprimand or percentages of evaluative comments are examined. That lower-income and middle-income students are subject to similar patterns of praise and reprimand should not necessarily be used as evidence that both groups of students are treated in a manner which maximizes their achievement. However, Evertson's (1975), Stallings' (1976) and the Soares' (1976) works

suggests that what may be effective reinforcement strategies for middle-income children may not be effective for lower-income children. Thus, while there is no evidence in the present data of differences in reinforcement patterns, at the same time similarities between schools do not necessarily imply equally effective teaching practices for all children. Kashinsky and Weiner (1969) found, for example, that whereas middle-class kindergartners respond similarly to positive, neutral and negative tones of voice, lower-class kindergartners differentiate between them and respond most productively to positive tones. Evertson compared observational data from classrooms of effective teachers with data from classrooms of less effective teachers and found that in middle-income schools the effective teachers used more reprimand and less praise than the less effective teachers, whereas in lower-income schools the effective teachers used less reprimand and more praise than the less effective teachers. Thus the fact that reprimands exceed praise in almost all the classrooms that were observed may have the effect of encouraging achievement among middle-income students but discouraging achievement among lower-income students.

Conclusion

Insofar as the schools observed are representative, the data do not support hypotheses that achievement differentials for low-income children early in school can be explained by less-than-average exposure to instruction or that teachers in urban schools are more critical of students than in suburban schools. There was no difference among schools in time devoted to cognitive instruction or in time devoted to social learning activities, and praises and reprimands differed much more by teacher than by school.

The time emphasis on procedural activity in all three schools is a major finding of this study. In every school more time was devoted to procedural activity than to any other single activity. The significant difference between schools in percentage of time devoted to procedural activity, with an inverse relation between income level and procedural activity, was surprising.

The "normal" classroom climate--more reprimand than praise in all three places--is a second major finding. Contrary to textbook emphasis on positive reinforcement as an aid to learning, in all schools reprimand exceeded praise and negative evaluations exceeded positive ones. The effect of reprimand may, however, be neutral or stimulating for middle-income children and inhibiting for low-income children. More work is called for on the interaction between patterns of reinforcement and achievement differentials associated with social status.

REFERENCES

- Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A.,
Weinfeld, F. D., & York, R. L. Equality of educational opportunity.
Washington, D.C.: U.S. Government Printing Office, 1966.
- Evertson, C. M. Relationship of teacher praise and criticism to student
outcomes. Austin: Research and Development Center for Teacher
Education, 1975.
- Gintis, H. Education, technology, and the characteristics of worker
productivity. American Economic Review, 1971, May, 266-279.
- Herndon, J. How to survive in your native land. New York: Simon & Shuster,
1971.
- Holt, J. The under-achieving school. New York: Dell, 1969.
- Husen, T. Talent, opportunity and career. Stockholm: Almqvist and Wiksell,
1969.
- Kashinsky, M. and Weiner, M. Tone in communication and the performance
of children from 2 socioeconomic groups. Child Development, 1969, Dec.,
1193-1202.
- Kraus, P. E. Yesterday's children. New York: Wiley, 1973.
- Lambert, W. E., Just, M. & Segalowitz, N. Some cognitive consequences
of following the curricula of the early grades in a foreign language.
Pp. 229-279 in J. Alatis (Ed.), 21st Annual Roundtable. Washington, D.C.:
Georgetown University Press, 1970.
- Mosteller, F. and Moynihan, D. P. (Eds.) On equality of educational
opportunity. New York: Vintage Books, 1972.
- Ogbu, J. U. Minority education and caste. New York: Academic Press, 1978.
- Rist, R. C. The socialization of the ghetto child into the urban school
system. Unpublished doctoral dissertation, Washington University, 1970.

Soare, R. S. and Soare, R. M. An attempt to identify measures of teacher effectiveness from four studies. Present at the annual meeting of the American Education Research Association, 1976.

Stallings, J. A. How instructional processes relate to child outcomes in a national study of follow through. Menlo Park, Ca.: Stanford Research Institute, 1976.

Tucker, G. R., Otones, F. T. and Sibagan, B. P. An alternate days approach to bilingual education. In J. E. Alatis (Ed.), 21st Annual Roundtable. Washington, D.C.: Georgetown University Press, 1970.

Figure 1

Observation Schedule

Observer: _____ Date: _____ Total Number of Children: _____
 Room Number: _____ Time began: _____ Present Today: _____
 School: _____ Time ended: _____

# Children Attending	Interruptions	Cognitive	Social	Procedural	Child Care or Attention Seeking
0	teacher out of class or talking to someone	alphabet phonics sight vocabulary	responsibly performing tasks manners	lining up going to the bath- room	tears tantrums discipline
1	who is not a member of the class	calendar clock numbers counting adding subtracting	knowledge of holidays opening exercises organized games	unplanned recess unplanned lunch or juice time	buttons, zippers, shoelaces
2 - 5		color recogni- tion story- telling	art music show and tell current events	fire drills transition between activities time teacher spends at desk	
6 - 10		story- listening following directions shape recogni- tion	introduction to school and its personnel		
11 - 15					
16 or more					

Table 1

Descriptive Data For Schools Taken from Maryland Accountability Program Report^a

	% Average Daily Attendance	% of Children Disadvantaged	Median Education of Mother	Median Family Income	Pupil Staff Ratio	Average Experience of Teachers (yrs.)	Staff: Master's Degree or Above
White Segregated School	96.4	2.1	12.4	14868	21.6	11.4	26.8
Integrated School	87.5	29.4	9.9	7434	22.8	9.4	18.5
Black Segregated School	91.7	26.8	10.0	7952	22.1	14.0	24.5

^aThis data was taken from the 1974-75 Maryland Accountability Program Report. The first item was taken from school records. The last three items in the words of the Report: "(were) supplied by Applied Urbanetics, Inc., which updated ESEA Title I statistics from 1970 Census data."

Table 2

Teacher's Distribution of Classroom Time (Percentages)

	<u>Procedural Activity</u>		<u>Cognitive Activity</u>		<u>Social Learning Activity</u>	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Black Segregated School	33.31	18.45	30.97	19.75	15.56	15.17
Classroom 1	33.11	16.01	29.44	20.41	17.72	19.16
Classroom 2	33.50	21.07	32.50	19.54	13.39	13.58
Integrated School	43.89	21.33	30.33	22.51	17.36	17.18
Classroom 3	43.44	21.49	23.72	15.96	20.56	19.02
Classroom 4	44.33	21.78	36.94	26.38	14.17	14.98
White Segregated School	53.78	23.31	23.67	17.59	17.89	15.17
Classroom 5	60.50	24.62	17.78	16.72	14.28	13.31
Classroom 6	47.06	20.41	29.56	16.85	21.50	16.41
	<u>Cognitive & Social Learning Activity</u>		<u>Interruptions</u>		<u>Child Care Activity</u>	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Black Segregated School	46.53	21.45	15.89	21.35	03.17	04.83
Classroom 1	47.17	20.52	11.72	12.75	05.33	05.73
Classroom 2	45.89	21.02	20.06	27.19	01.00	02.30
Integrated School	47.69	25.89	03.36	04.75	05.06	06.65
Classroom 3	44.28	28.68	04.61	05.17	07.67	07.63
Classroom 4	51.11	23.08	02.11	04.06	02.44	04.29
White Segregated School	41.56	22.63	02.47	04.64	00.31	00.95
Classroom 5	32.06	19.42	03.11	05.18	00.56	01.29
Classroom 6	51.06	23.86	01.83	04.09	00.06	00.24

Table 3

Daily Average Number of Praises and
Reprimands per 15-Minute Recording Period

	<u>Praise</u>		<u>Reprimand</u>	
	Mean	S.D.	Mean	S.D.
Black Segregated Urban School	0.96	1.19	3.82	3.33
Classroom 1	1.19	1.12	4.92	4.19
Classroom 2	0.74	1.26	2.71	1.64
Integrated Urban School	2.73	2.51	3.68	3.90
Classroom 3	2.77	2.63	1.37	1.02
Classroom 4	2.68	2.45	5.99	4.35
White Segregated Suburban School	2.23	2.65	2.90	3.24
Classroom 5	3.96	2.80	4.59	3.73
Classroom 6	0.50	0.50	1.21	1.30